

CLAIMS

1. A semiconductor light receiving element having a light absorbing layer on a plane generally parallel to a plane with which said element is mounted on a substrate, said semiconductor light receiving element being configured such that light which is transmitted through a region having a light transmittance different from that of said light absorbing layer, is projected within a 2-dimensionl projected area of said semiconductor light receiving element which is obtained when said semiconductor light receiving element is projected onto the plane on which said element is to be mounted.

2. A semiconductor light receiving element comprising a light absorbing layer on a plane that is substantially parallel to a plane with which said light receiving element is to be mounted on a substrate, wherein a region is formed in a portion of said light absorbing layer, said region having a light transmittance that is higher than a light transmittance of said light absorbing layer.

3. The semiconductor light receiving element as claimed in Claim 2, wherein said light transmittance of said region having the higher light transmittance than that of said light absorbing layer is equal to 30% or higher with respect to an illumination light for irradiation used when said semiconductor light receiving element is mounted on said substrate.

4. A semiconductor light receiving element according to claim 3, wherein said region having the light trans-

mittance equal to 30% or higher forms on said substrate an projected area of at least $100 \mu\text{m}^2$ when said semiconductor light receiving element is mounted on said substrate.

5. A semiconductor light receiving element according to claim 3, wherein said region having the light transmittance equal to 30% or higher is provided at least at two locations.

6. A semiconductor light receiving element according to claim 3, wherein said semiconductor light receiving element includes an edge emitting/incidence type light receiving element and said region having the light transmittance equal to 30% or higher is provided at least in a pair, respective regions of each pair are located at positions corresponding to right and left sides of an optical axis of a light receiving surface of said edge emitting/incidence type semiconductor light receiving element.

7. A semiconductor light receiving element having a light absorbing layer on a plane generally parallel to a plane with which said element is mounted on a substrate, said semiconductor light receiving element being configured such that light which is transmitted through a region having a light transmittance different from that of said light absorbing layer, is projected inside a 2-dimensionl projected area of said light redeiving element which is formed when said semiconductor light receiving element is projected onto the plane on which said element is to be mounted and an image of a positioning marker is also

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projected inside said projected area onto which the light transmitted through the region having a light transmittance different from that of said light absorbing layer is projected.

8. The semiconductor light receiving element as claimed in either Claim 2 or 7, wherein said region having said light transmittance that is different from said light transmittance of said light absorbing layer is a region from which said light absorbing layer is eliminated.

9. The semiconductor light receiving element as claimed in either Claim 2 or 7, wherein said positioning marker is provided within said region having said light transmittance that is different from said light transmittance of said light absorbing layer.

10. An optical module, wherein said semiconductor light receiving element as claimed in any one of Claims 1 to 9 is optically coupled to an optical fiber and mounted on a same substrate.

11. An optical module, wherein a semiconductor laser, an optical fiber, and said semiconductor light receiving element as claimed in any one of Claims 1 to 9 optically coupled to at least one of said semiconductor laser and optical fiber, are mounted on a same substrate.

12. The optical module as claimed in either Claim 10 or 11, wherein said semiconductor light receiving element mounted on said substrate is configured by being packaged with either ceramic or resin.

13. The optical module as claimed in either Claim 10

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or 11, wherein an electronic circuit is further mounted on said substrate, said electronic circuit being configured by being packaged with either ceramic or resin.

14. An optical transmission apparatus, wherein said optical module as claimed in any one of Claims 10 to 13 and an electronic circuit are mounted on a same board, said electronic circuit being connected to said optical module and executing at least either processing of a sending processing and a receiving processing of a light signal.

15. A method of fabricating an edge emitting/incidence type semiconductor light receiving element formed by sequentially laminating on a substrate a plurality of different thin film layers including a light absorbing layer, wherein a thin film growth at a predetermined region is prohibited during steps of laminating said light absorbing layer and subsequent thin film layers so that said semiconductor light receiving element may be adapted to be positioned in place.

16. A method of fabricating an edge emitting/incidence type semiconductor light receiving element formed by sequentially laminating on a substrate a plurality of different thin film layers including a light absorbing layer, comprising an etching step for eliminating said light absorbing layer existing under a predetermined region so that said semiconductor light receiving element may be adapted to be positioned in place.

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